

What is claimed is:

1. An isolated polypeptide selected from the group consisting of:

- (i) an isolated polypeptide comprising a polypeptide sequence selected from the group having at least 95% identity to the polypeptide sequence of SEQ ID NO:2;
- (ii) an isolated polypeptide comprising the polypeptide sequence of SEQ ID NO:2; or
- (iii) an isolated polypeptide which is the polypeptide sequence of SEQ ID NO:2.

2. An isolated polynucleotide selected from the group consisting of:

- (i) an isolated polynucleotide comprising a polynucleotide sequence encoding a polypeptide sequence that has at least 95% identity to the polypeptide of SEQ ID NO:2;
- (ii) an isolated polynucleotide comprising a polynucleotide sequence which has at least 95% identity to that of SEQ ID NO: 1;
- (iii) an isolated polynucleotide comprising a polynucleotide sequence encoding the polypeptide of SEQ ID NO:2;
- (iv) an isolated polynucleotide encoding the polypeptide of SEQ ID NO:2;
- (v) an isolated polynucleotide which is the polynucleotide of SEQ ID NO: 1;
- (vi) an isolated polynucleotide obtainable by screening a library under stringent hybridization conditions with a labeled probe having the sequence of SEQ ID NO: 1 or a fragment thereof;
- (vii) a polynucleotide which is the RNA equivalent of a polynucleotide of (i) to (vi); or
- or a polynucleotide sequence complementary to said isolated polynucleotide.

3. An antibody immunospecific for the polypeptide of claim 1.

4. A process for diagnosing a disease or a susceptibility to a disease in a subject related to expression or activity of the polypeptide of claim 1 in a subject comprising:

- (a) determining the presence or absence of a mutation in the nucleotide sequence encoding said polypeptide in the genome of said subject; and/or
- (b) analyzing for the presence or amount of said polypeptide expression in a sample derived from said subject.

5. A method for screening compounds to identify those which stimulate or which inhibit the function of the polypeptide of claim 1 which comprises a method selected from the group consisting of:

(a) measuring the binding of a candidate compound to the polypeptide (or to the cells or membranes expressing the polypeptide) or a fusion protein thereof by means of a label directly or indirectly associated with the candidate compound;

(b) measuring the binding of a candidate compound to the polypeptide (or to the cells or membranes expressing the polypeptide) or a fusion protein thereof in the presence of a labeled competitor;

(c) testing whether the candidate compound results in a signal generated by activation or inhibition of the polypeptide, using detection systems appropriate to the cells or cell membranes expressing the polypeptide;

(d) mixing a candidate compound with a solution containing a polypeptide of claim 1, to form a mixture, measuring activity of the polypeptide in the mixture, and comparing the activity of the mixture to a standard; or

(e) detecting the effect of a candidate compound on the production of mRNA encoding said polypeptide and said polypeptide in cells, using for instance, an ELISA assay.

6. An expression vector comprising a polynucleotide capable of producing a polypeptide of claim 1 when said expression vector is present in a compatible host cell.

7. A process for producing a recombinant host cell comprising the step of introducing the expression vector of claim 6 into a cell such that the host cell, under appropriate culture conditions, produces said polypeptide.

8. A recombinant host cell produced by the process of claim 7.

9. A membrane of a recombinant host cell of claim 8 expressing said polypeptide.

10. A process for producing a polypeptide comprising culturing a host cell of claim 8 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture.

11. An isolated polynucleotide selected from the group consisting of

(a) an isolated polynucleotide comprising a nucleotide sequence which has at least 95% identity to SEQ ID NO:3 over the entire length of SEQ ID NO:3;

- (b) an isolated polynucleotide comprising the polynucleotide of SEQ ID NO:3;
(c) the polynucleotide of SEQ ID NO:3; or
(d) an isolated polynucleotide comprising a nucleotide sequence encoding a polypeptide which has at least 95% identity to the amino acid sequence of SEQ ID NO:4, over the entire length of SEQ ID NO:4.

12. A polypeptide selected from the group consisting of
(a) a polypeptide which comprises an amino acid sequence which has at least 95% identity to that of SEQ ID NO:4 over the entire length of SEQ ID NO:4;
10 (b) a polypeptide in which the amino acid sequence has at least 95% identity to the amino acid sequence of SEQ ID NO:4 over the entire length of SEQ ID NO:4;
(c) a polypeptide which comprises the amino acid of SEQ ID NO:4;
(d) a polypeptide which is the polypeptide of SEQ ID NO:4; or
(e) a polypeptide which is encoded by a polynucleotide comprising the sequence contained in
15 SEQ ID NO:3.

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